ARO Industrial Chain Hoists

ARO®

Table of Contents

Aro Industrial Hoists 1-2
Ordering Hoists 3
Choosing the Right Hoist 3

7740B Series Link Chain Hoists
Standard and Manual Trolley 4

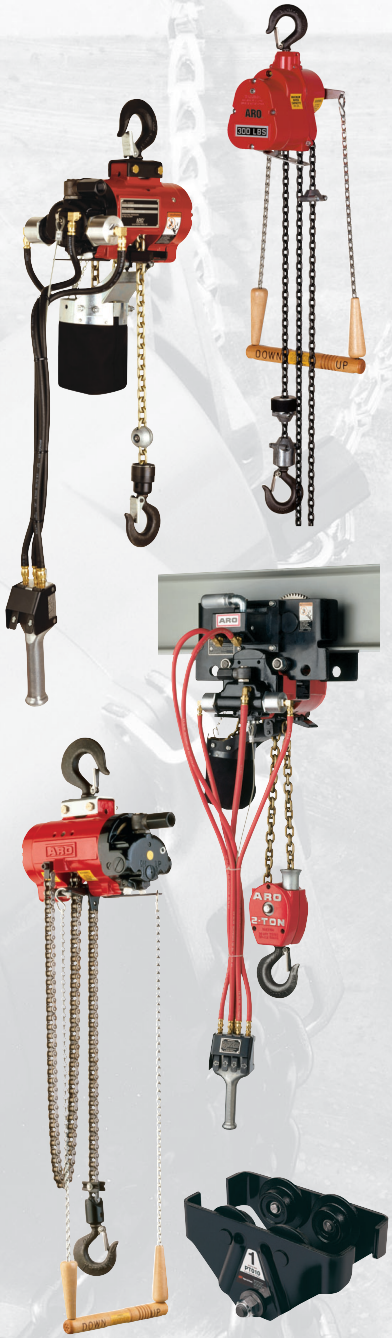
7700 and 7790 Series Link Chain Hoists
Standard and Power Trolley 5-6

7700 and 7790 Series Link Chain Hoists
Spark Resistant 7

7700 Series Roller Chain Hoists
Spark Resistant 8

Hoist Accessories
Trolleys 9
TIR Flange Kits and Adapters 10
Trolley Adapters 10
Load Chain 10
Hose Carrier Trolley 10
Restraining Cable 10
Chain Baskets 11
Exhausts 11
Hoist Controls 11
Hooks 12
Maintenance Items 13
Lubricants 13

Ordering Guide 14
Performance Data 15
Dimensional Drawings 16-17
Contact Information ..... Back Cover



Warranty

Ingersoll-Rand Company (I-R) warrants to the original user its ARO manufactured Pneumatic Chain Hoists (Products) to be free of defects in material and workmanship for a period of one year from the date of purchase. ARO will repair, without cost, any Product found to be defective, including parts and labor charges, or at its option, will replace such Products or refund the purchase price less a reasonable allowance for depreciation, in exchange for the Product. Repairs or replacements are warranted for the remainder of the original warranty period.

If any Product proves defective within its original warranty period, it should be returned to any ARO Authorized Service Repair Center, transportation prepaid, with proof of purchase or warranty card.

This warranty does not apply to Products which ARO has determined to have been misused or abused, improperly maintained by the user, or where the malfunction or defect can be attributed to the use of non-genuine ARO parts.

I-R makes no other warranty, and all implied warranties including any warranty of merchantability or fitness for a particular purpose are limited to the duration of the expressed warranty period as set forth above. I-R's maximum liability is limited to the purchase price of the Product and in no event shall I-R be liable for any consequential, indirect, incidental, or special damages of any nature rising from the sale or use of the Product, whether based on contract, tort, or otherwise.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

Note: Some states do not allow limitations on incidental or consequential damages or how long an implied warranty lasts so the above limitations may not apply to you.

WARNING
This equipment is not to be used for lifting, supporting, or transporting people, or lifting or supporting loads over people.

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ARO Industrial Chain Hoists

A Legacy of Innovation

For over half a century, ARO has been recognized as a leader in the design and manufacture of high-quality industrial tools and equipment. Striving to deliver superior performing products through a combination of technology and innovation, ARO has continued to define state-of-the-art.

With a history of consumer-driven service, ARO has been solving the material handling needs for a variety of production and maintenance industries. Their commitment to quality, dependability, and performance is what has kept ARO at the forefront of an ever-changing workplace.

ARO offers the most popular range of versatile rotary-vane air hoists available. Continually making advancements in technology, materials, and design, ARO has out-paced competitive manufacturers with inherent advantages that make these rotary-vane air hoists the performance leaders.

Looking for an innovative alternative to traditional electric and piston powered air hoists, ARO was the first manufacturer to develop and introduce the rotary-vane air hoist. With fewer moving parts and a longer operating life, these air-powered hoists are more cost-effective to maintain and service than traditional hoists.

While other manufacturers have tried to imitate the design and performance of the ARO rotary-vane air hoist, none have been able to match ARO's quality, dependability and craftsmanship.

Manufactured to provide the high speeds, continuous duty, and spotting requirements demanded by automotive assembly, furniture manufacturers, foundries, food processing, aerospace and plating operations, ARO hoists have become the preferred hoist in the transportation industry. Today, ARO hoists can be found in hundreds of automobile, truck, and component plants worldwide.

Whatever the application or environment – hot, dirty, wet, explosive – ARO hoists have been designed and built to match almost any industrial need.

All ARO hoists meet

ASME B30.16 Industry Standards.

ARO Industrial Chain Hoists

Quality and Performance

ARO 7700 & 7790 Series Hoists

ARO hoists can be equipped with a variety of optional features that can be matched to the specifications of almost any job. ARO hoist's long operating life, cost-effective service and maintenance, and dependable performance are supported by a host of standard features.

Rotary-Vane Air Motors

These powerful, self-cooling rotary motors keep ARO hoists at peak performance in high temperature situations. And, because they are air-powered, they further reduce the chance of causing sparks in a volatile environment.

Complete Operator Control

Pressure pendant or pull chain puts complete control of the hoist in the operator's hands. Hoist responds immediately to operator's "inching" commands.

External Brake Adjustment

Easily customizes the "sensitivity" of the hoist to the load range for any application. This results in ease-of-operation with better spotting, feathering and overall control.

Fast, Efficient Load Handling

Rotary-vane air motors and efficient gearing combine to deliver one of the fastest lift speeds available. Gear ratios have been calculated to yield the lowest possible air consumption.

Job-Matched Performance

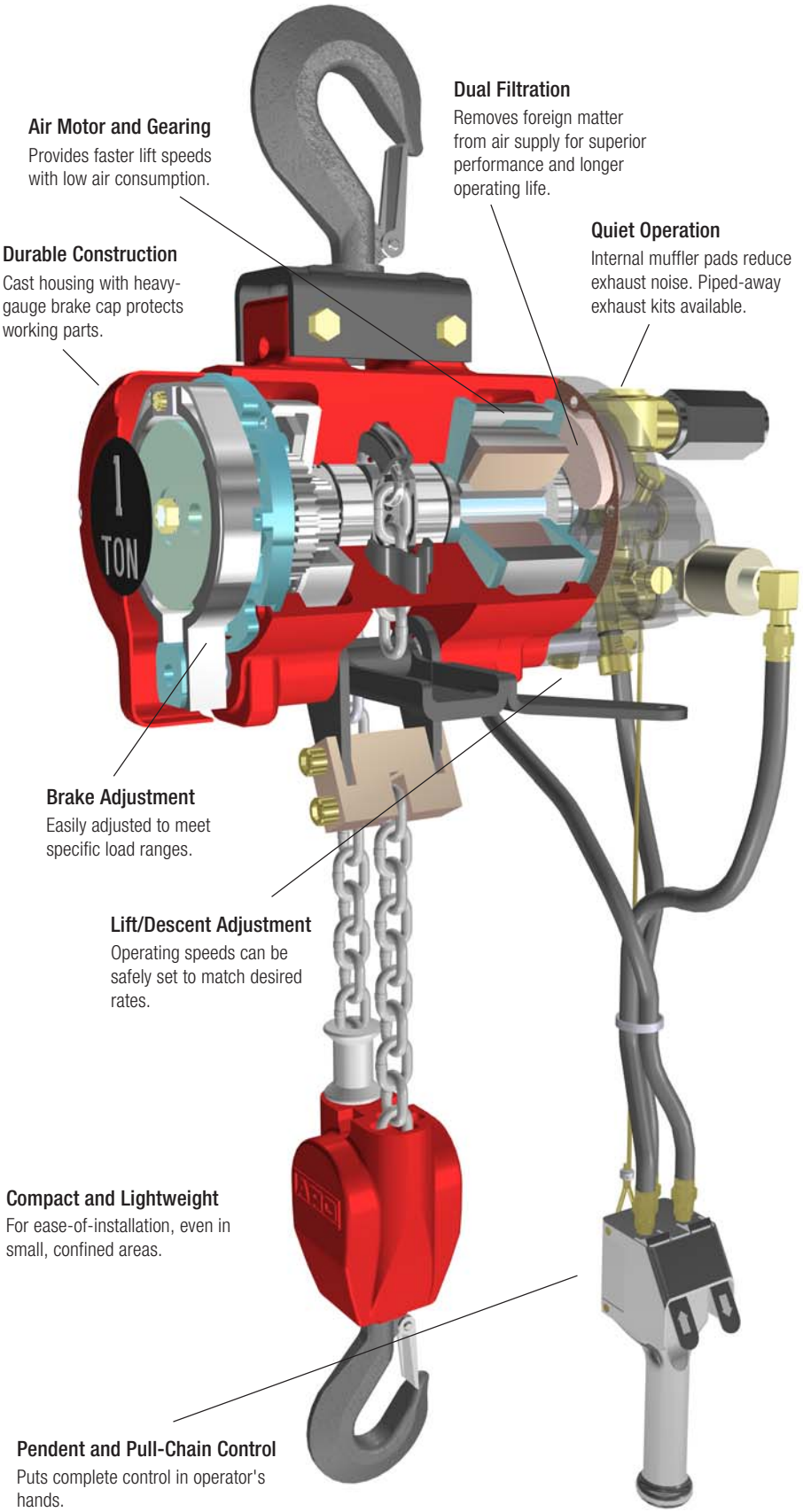
Numerous options allow ARO hoists to be matched to specific application requirements – link or roller load chains, hook types, manual and power trolleys, pull chain or pendant control, standard and spark resistant, and 300 lbs - 2 ton capacities.

Clean and Quiet

For applications and environments that require clean air, exhaust can be piped away. Two-stage filtration system removes foreign matter from air supplies so that motors can operate at peak performance with longer operating lives.

Easy Installation

Lightweight and convenient, ARO hoists are easier to install than any other model. Even in small, confined areas, they can be installed and removed with minimal effort.



Choosing the Right Hoist

Material handling needs differ from application to application. ARO offers numerous hoist types with a range of options that can be matched to meet your specific application requirements. When the time comes to select the appropriate hoist for your needs, you should consider the following criteria.

Maximum Load

The first consideration when choosing a hoist is the maximum load the hoist will need to accommodate. ARO hoists have weight ratings that range from 300 lbs to 2 tons. The second consideration is hoist speed. The speed of a hoist is dependent on the corresponding cycle time of the task to be performed – lift, transport, lower, return, start again.

Installation Requirements

ARO hoists, whether hook or trolley configured, can be mounted on several beam configurations. Compact for low headroom requirements, ARO Hoists can be mounted in areas where others can't.

Air Supply

To ensure maximum operating performance, ARO rotary-vane air hoists require air supplies that continually provide clean, lubricated air at sufficient pressure and volume. The ARO AJ300 requires 90 psig at 28 scfm, while all other ARO hoists require 90 psig at 65-70 scfm.

Control Method

ARO rotary-vane air hoists control lift and descent by admitting proportional amounts of air to the motor by way of a spool valve. ARO offers two control systems:

- Pendant Control systems use a 3-hose pilot pressure/bleed system to open and throttle the spool valve.
- Pull Chain systems operate in the same manner using operator-controlled pull chains attached to a control arm to open and close the spool valve.

Ordering Hoists

- Use the "Performance Data" Chart to identify desired hoist characteristics starting with "Load Capacity."
- Starting with identification of the base model, use the "Ordering Guide" to select the appropriate hoist product.
  Hoist options – type of chain, suspension, control type – should correspond with selected hoist.
- "Lift" options indicate the maximum amount of lift or lowering (in feet) the hoist needs to perform. (Note: a hoist may need to "lower" an item farther than it needs to "lift" it).
  •Length of control, either pendant or pull chain, should correspond with the approximate distance between the operator and hoist (usually 4 feet less than the length of "lift").

7740B Series Link Chain Hoist

The 7740B air chain hoist has been engineered for production and utility applications for loads up to 300 lbs.

Incredibly light, compact and portable, these hoists have been designed so that they can be moved between workstations to perform various lift operations. Requiring only 28 scfm of air flow, the 7740B will operate from compressors as small as 3 horsepower.

7740B Series hoists come complete with 10 feet of standard lift and 6 feet of pull chain control. (Longer lifts can be specified)

Durable and Dependable

The 7740B hoist features a cool-running rotary-vane air motor.

Safety and Confidence

A self-adjusting spring applied brake holds loads securely – even if a power or air-supply failure occurs. Also standard is the adjustable emergency limit stop preventing possible damage to the load or injury to the operator if the operator fails to release the lift command.

Full Control

Pull Chain control on the 7740B provides the operator with total control and the ability to "inch" loads into place with confidence. The combination of cool-running, rotary-vane performance and easy-to-use controls helps to increase operator productivity.

Features

- Light weight and compact design for ease of movement to different work locations.
- Rotary vane air motor.
- Self-adjusting brake holds loas securely.
- May be operated between 60 and 100 psi.
- Pull chain control provides accurate spotting control.
- Standard lift is 10 feet; additional lifts are available.
- Standard pull chain length is 6 feet or 4 feet less than lift.
- Steel snap hooks.
- Hook or eye bolt mounted available.

Options

- Manual trolley
- Bullard hooks
- Chain bucket

7740B Series Specifications

Description	7740B
Rated capacity (lbs)	300
Control type	Pull chain
Suspension	Hook or eyebolt
Falls of chain	1
Lifting speed w/rated load variable from 1 to...fpm	16
Lowering speed w/rated load variable from 1 to...fpm	17
Air pressure (psi)	90
Air consumption at max rated load scfm	28
Air inlet size, (in.)	1/4 NPT
Recommended hose size (in.)	3/8 I.D.
Chain basket: See chain basket chart in accessories	
Load chain size, link (Dia./Pitch)	.157/.471
Weight of hoist (lbs)	15.25

7700 and 7790 Series Link Chain Hoists

Continuous Heavy-Duty Applications

7700 Series: 275 – 2200 lb Capacity

7700 Series Link Chain hoists have been designed specifically for heavy-duty industrial applications where loads vary between 275 lbs and 2200 lbs. Simple, rugged, and reliable, these hoists are constructed with few moving parts, for easy repairs and less down time.

7700 Series hoists come complete with 10 feet of standard lift and either 6 feet of pendant control or 6 feet of pull chain control.

Features

- Exceptional slow-speed control provides superior spotting characteristics and ability to confidently "inch" loads into position.
- Ideal for high duty cycles and when operating loads are near maximum capacity.
- Powerful, self-cooling rotary motors keep ARO hoists at peak performance in high temperature situations.
- Pendant or pull chain control responds immediately to operator's commands.
- Brake control easily adjusts to meet specific load ranges.
- Motor and gearing provides faster lift speeds with low air consumption.
- Compared to roller chain, link chain lasts longer, handles heavier loads, and is better for high duty cycles.

Options

Suspension

7700 and 7790 Series hoists are available with a variety of suspension options, hook types, manual and power trolleys to meet the needs of any operation. For added operator safety, power trolley traverse speeds are set to gradually increase and decrease to ensure safe load control with minimal load sway.

Control

ARO hoists are available with two easy-to-use control options – pressure pendant or pull chain control. Both systems provide the operator with total hoist control and the ability to confidently inch loads into place. Pendant controls, when ordered with power trolley systems, control both hoist operation and trolley movement.

7700 Series Specifications

Description	7770E	7718E	7756E	7776E
Rated capacity (lbs)	275	550	1100	2200
Control type	Pull chain/Pendent	Pull chain/Pendent	Pull chain/Pendent	Pull chain/Pendent
Suspension	Hook/Trolley adapter	Hook/Trolley adapter	Hook/Trolley adapter	Hook/Trolley adapter
Falls of chain	1	1	1	2
Lifting speed w/rated load variable from 1 to...fpm	20-110	28-82	14-41	7-21
Lowering speed w/rated load variable from 1 to...fpm	140-275	120-224	60-112	30-56
Air pressure (psi)	90	90	90	90
Air consumption at max rated load (scfm)	65-70	65-70	65-70	65-70
Air inlet size, with 180^0 swivel (in.)	1/2 NPTF	1/2 NPTF	1/2 NPTF	1/2 NPTF
Recommended hose size (in.)	1/2 I.D.	1/2 I.D.	1/2 I.D.	1/2 I.D.
Chain basket: See chain basket chart in accessories	Canvas/Metal	Canvas/Metal	Canvas/Metal	Canvas/Metal
Load chain size, link (Dia./Pitch)	.250/.750	.250/.750	.250/.750	.250/.750
Weight of hoist (lbs)				
w/Pull chain	36	36	36	48
w/Pendent	41	41	41	53
Power Trolley Performnce Data				
Beam type	Tapered/Flat track	Tapered/Flat track	Tapered/Flat track	Tapered/Flat track
Minimum-maximum beam height (in.)	8-12	8-12	8-12	8-12
Standard minimum-maximum beam width (in.)	3 1/4-6	3 1/4-6	3 1/4-6	3 1/4-6
Minimum turning radius (ft)	3 1/2	3 1/2	3 1/2	3 1/2
Traverse speed (ft/min)	70	70	70	70
System weight (lbs)	94	94	94	106

7700 and 7790 Series Link Chain Hoists

Continuous Heavy-Duty Applications

7790 Series: 2200 and 4400 lb Capacity

7790 Series Link Chain hoists are ARO's most powerful units. The larger motor and increased horsepower provide greater operational speeds and productivity in the one ton single-fall and two ton double-fall ranges. A key advantage of single-fall operation is that both longer lifts and chain storage become easier to manage. Built with the same high-quality construction as the 7700 Series, these hoists also require fewer repairs with less down time.

7790 Series hoists come complete with 10 feet of standard lift and 6 feet of pendant or pull chain control.

Features

- Larger motor and gearing provides increased horsepower for faster lift speeds.
- Larger link chain – 5/16" diameter compared to 1/4" diameter on 7700 hoists, accommodates larger loads with longer chain life.
- Headroom advantage in one ton capacities:
  - 2 13/16" advantage over hook mounted 7700 models.
  - 6 13/16" advantage over manual trolley 7700 models.
  - 4 1/2" advantage over power trolley 7700 models.
- Pull chain or pendant control provides superior spotting characteristics and the ability to confidently "inch" loads into position.

Options Continued

Spark Resistant

Because of their operating characteristics, air hoists are generally considered spark resistant. Standard 7700 and 7790 Series hoists come with steel snap-hooks and load chain and are regarded as safe for Division 2 applications. Spark resistant models offer even more protection in the form of stainless steel link load chain and bronze snap-hooks, and are the only ARO hoists suitable for Division 1 applications. ARO offers a variety of hoist options and accessories. Refer to the accessories page for additional information.

7790 Series Specifications

Description	7790A	7792A
Rated capacity (lbs)	2200	4400
Control type	Pull chain/Pendent	Pull chain/Pendent
Suspension	Hook/Trolley adapter	Hook/Trolley adapter
Falls of chain	1	2
Lifting speed w/rated load variable from 1 to...fpm	4-26	0-12
Lowering speed w/rated load variable from 1 to...fpm	5-44	4-24
Air pressure (psi)	90	90
Air consumption at max rated load (scfm)	65-70	65-70
Air inlet size, with 180^0 swivel (in.)	1/2 NPTF	1/2 NPTF
Recommended hose size (in.)	1/2 I.D.	1/2 I.D.
Chain basket: See chain basket chart in accessories	Canvas/Metal	Canvas/Meta
Load chain size, link (Dia./Pitch)	.312/.858	.312/.858
Weight of hoist (lbs)		
w/Pull chain	57	76
w/Pendent	62	81
Power Trolley Performnce Data		
Beam type	Tapered/Flat track	Tapered/Flat track
Minimum-maximum beam height (in.)	8-12	8-12
Standard minimum-maximum beam width (in.)	3 1/4-6	3 1/4-6
Minimum turning radius (ft)	3 1/2	3 1/2
Traverse speed (ft/min)	70	70
System weight (lbs)	110	129

Spark Resistant

7700 and 7790 Series Link Chain Hoists

Continuous Heavy-Duty Applications

7700 Series: 400 – 1500 lb Capacity
7790 Series: 1500 – 3000 lb Capacity

7700 and 7790 Series Spark Resistant Hoists are designed for Division 1 applications where, under normal operating conditions, the atmosphere contains hazardous concentrations of flammable gases, dust, or other materials.

Specifically engineered for continuous heavy-duty industrial applications – between 400 lbs and 1500 lbs – ARO 7700 Series Spark Resistant Hoists are available with bronze top hook or trolley adapter suspension.

7700 and 7790 Series Spark Resistant Hoists come complete with 10 feet of standard lift and either 6 feet of pendant control or 6 feet of pull chain control.

Spark Resistant Features

- Stainless steel load chain and solid bronze hooks to prevent accidental sparking.
- Pendant control handles, when ordered, are covered with an industrial-grade vinyl grip. Pull chain controls come standard with zinc-plated pull chain.
- Hoist capacities are reduced and speed adjustments are locked into place to maximize chain life.
- Trolley models are supplied with bronze wheels.

Division 1 & 2 Applications

The following definitions may be used as a guide. The actual Division distinction for each application must be determined by your local inspecting authority of the fire underwriters.

Division 1 (Spark-Resistant air hoists are required)

Atmospheres containing hazardous concentrations of flammable gases, dusts, or fibers, continuously, frequently or periodically, under normal operating conditions.

Division 2 (Standard air hoists are required)

Atmospheres, normally non-hazardous, in which a hazardous concentration of flammable gases, dusts, or fibers, occurs when a container or handling system fails, or the ventilating system which normally keeps the concentration non-hazardous fails.

7700 and 7790 Spark Resistant Series Specifications

Description	7712EL	7714EL	7796AL	7798AL	7799AL
Rated capacity (lbs)	500	1500	1500	2400	3000
Control type	Pull chain	Pull chain	Pull chain/Pendent	Pull chain/Pendent	Pull chain/Pendent
Suspension			Hook/Trolley adapter		
Falls of chain	1	2	1	2	2
Lifting speed w/rated load variable from 1 to...fpm	16	13	8	4.6	3.5
Lowering speed w/rated load variable from 1 to...fpm	70	16	16	12	7
Air pressure (psi)			90		
Air consumption at max rated load (scfm)	65-70	65-70	65-70	65-70	65-70
Air inlet size, with 180^0 swivel (in.)			1/2 NPTF		
Recommended hose size (in.)			1/2 I.D.		
Chain basket: See chain basket chart in accessories	Canvas	Canvas	Canvas	Canvas	Canvas
Load chain size, link (Dia./Pitch)	.250/.750	.250/.750	.312/.858	.250/.750	.250/.750
Weight of hoist (lbs)					
w/Pull chain	36	48	57	76	76
w/Pendent	41	41	62	81	81

Standard and Powered Trolley

7700 Series Roller Chain Hoists

Continuous Heavy-Duty Applications

7700 Series: 400 – 1600 lb Capacity

7700 Series Roller Chain hoists have been designed specifically for heavy-duty industrial applications where loads vary between 400 lbs and 1600 lbs. Roller chain is not recommended for operations with high duty cycles or side loading requirements. Simple, rugged, and reliable, these hoists are constructed with few moving parts, for easy repairs and less down time. Load capacities for 7700 Series hoists with roller chain have been reduced due to dynamic load-limiting chain characteristics.

7700 Series hoists come complete with 10 feet of standard lift and either 6 feet of pendant control or 6 feet of pull chain control.

7700 Roller Chain Features:

- Exceptional slow-speed control provides superior spotting characteristics and the ability to confidently "inch" loads into position.
- Powerful, self-cooling rotary motors keep ARO hoists at peak performance in high temperature situations.
- Motor and gearing provide fast lift speeds and low air consumption.
- Responsive controls – pendant or pull chain – react immediately to operator's commands.
- Roller chain hoists make ideal drive motors with a continuous loop of roller chain. ARO "hoist rated" roller chain size: 0.400"/0.625" (diameter/pitch).

7700 Roller Chain Series Specifications

Description	7720E	7708E	7732E
Rated capacity (lbs)	400	800	2200
Control type	Pull chain/Pendent	Pull chain/Pendent	Pull chain/Pendent
Suspension	Hook/Trolley adapter	Hook/Trolley adapter	Hook/Trolley adapter
Falls of chain	1	1	2
Lifting speed[1]	48-100	24-50	12-25
Lowering speed[1]	56-202	28-101	14-51
Air pressure (psi)	90	90	90
Air consumption at max rated load (scfm)	65-70	65-70	65-70
Air inlet size, with 180^0 swivel (in.)	1/2 NPTF	1/2 NPTF	1/2 NPTF
Recommended hose size (in.)	1/2 I.D.	1/2 I.D.	1/2 I.D.
Chain basket: See chart in accessories	Metal	Metal	Metal
Load chain size, link (Dia./Pitch)	.400/.625	.400/.625	.400/.625
Weight of hoist (lbs)			
w/Pull chain	36	36	48
w/Pendent	41	41	53
Power Trolley Performnce Data			
Beam type	Tapered/Flat track	Tapered/Flat track	Tapered/Flat track
Minimum-maximum beam height (in.)	8-12	8-12	8-12
Std minimum-maximum beam width (in.)	3 1/4-6	3 1/4-6	3 1/4-6
Minimum turning radius (ft)	3 1/2	3 1/2	3 1/2
Traverse speed (ft/min)	70	70	70
System weight (lbs)	94	94	106

(1) w/rated load variable from 1 to...fpm

Trolleys

All hoists ordered with a trolley using the model code will mount directly to the trolley supplied. All trolleys can be ordered separately by specifying model required according to hoist and beam configurations. See flange width adjustment chart below for trolley type used and flange width compatabilities. See individual charts for complete model numbers.

SP Series Trolley

PT Series Trolley

TIR Series Trolley

Flange Width Adjustment Chart

Hoist Base Model	Hoist Capacity (lbs)	Trolley Supplied	Flange Width Min – Max in. "A"	"B"	"D"	Min. Curve Radius in.
Plain Trolley (Suspension Codes DA, DB, DC and DD except 7740B)						
7740B	300	SP Series	Single adjustment of 1.97 – 8.00			36
7712EL	550	PT Series	2.66 – 4.66	2.66 – 8.00	NA	36
7714EL	1500	PT Series	3.00 – 5.25	3.00 – 8.00	NA	36
7796AL, 7798AL, 7799AL	1500, 2400, 3000	TIR Series	3.25 – 6.00	NA	6.01 – 12.00	42
7712ER, 7714ER	400, 800	PT Series	2.66 – 4.66	2.66 – 8.00	NA	36
Hand Chain Geared Trolley (Suspension Codes FXXA AND FXXD)						
All 7700 and 7790 models	All	TIR Series	3.25 – 6.00	NA	6.01 – 12.00	42
Powered Trolley (Suspension Codes HA AND HD)						
All 7700 and 7790 models	All	TIR Series	3.25 – 6.00	NA	6.01 – 12.00	42

Hoist/Trolley Compatability Chart for 7700 and 7790 Series Hoists

Hoist Base Model	Plain Hook-On	Plain Rigid	Geared Hook-On	Geared Rigid	Motorized
PT Series Trolley					
Standard, for use with:					
7770E	PT005A	**PT005A**(1)	N/A	N/A	N/A
7718E, 7720E	PT005A	**PT005A**(1)	N/A	N/A	N/A
7756E, 7708E	PT005A	**PT005A**(1)	N/A	N/A	N/A
7776E, 7732E	PT010A	**PT010A**(1)	N/A	N/A	N/A
7790A	PT010A	Uses **TIR**	N/A	N/A	N/A
7792A	PT020A	Uses **TIR**	N/A	N/A	N/A
Spark Resistant, for use with:					
7712EL, 7712ER	PT005A-SB	**PT005A-SB**(1)	N/A	N/A	N/A
7714EL, 7714ER	PT005A-SB	**PT005A-SB**(1)	N/A	N/A	N/A
7796AL	PT010A-SB	Uses **TIR**	N/A	N/A	N/A
7798AL, 7799AL	PT020A-SB	Uses **TIR**	N/A	N/A	N/A
TIR Series Trolleys					
Standard, for use with:					
7770E	TIR6600S-P00AH	TIR6600S-P00AE	TIR6600S-G08AH	**TIR6600S-G08AE**	**TIR6600S-307AE**
7718E, 7720E	TIR6600S-P00AH	TIR6600S-P00AE	TIR6600S-G08AH	**TIR6600S-G08AE**	**TIR6600S-307AE**
7756E, 7708E	TIR6600S-P00AH	TIR6600S-P00AE	TIR6600S-G08AH	**TIR6600S-G08AE**	**TIR6600S-307AE**
7776E, 7732E	TIR6600S-P00AH	TIR6600S-P00AE	TIR6600S-G08AH	**TIR6600S-G08AE**	**TIR6600S-307AE**
7790A	TIR6600S-P00AH	**TIR6600S-P00AA**	TIR6600S-G08AH	**TIR6600S-G08AA**	**TIR6600S-307AA**
7792A	TIR6600S-P00AH	**TIR6600S-P00AA**	TIR6600S-G08AH	**TIR6600S-G08AA**	**TIR6600S-307AA**
Spark Resistant, for use with:					
7712EL, 7712ER	TIR6600B-P00AH	TIR6600B-P00AE	TIR6600B-G08AH	**TIR6600B-G08AE**	**TIR6600S-307AE**
7714EL, 7714ER	TIR6600B-P00AH	TIR6600B-P00AE	TIR6600B-G08AH	**TIR6600B-G08AE**	**TIR6600S-307AE**
7796EL	TIR6600B-P00AH	**TIR6600B-P00AA**	TIR6600B-G08AH	**TIR6600B-G08AE**	**TIR6600S-307AA**
7798EL	TIR6600B-P00AH	**TIR6600B-P00AA**	TIR6600B-G08AH	**TIR6600B-G08AE**	**TIR6600S-307AA**
7798AL	TIR6600B-P00AH	**TIR6600B-P00AA**	TIR6600B-G08AH	**TIR6600B-G08AA**	**TIR6600S-307AA**

Trolley part numbers in bold indicate the trolley supplied when ordered with an Air Hoist, using the model number suspension codes:
Plain Rigid = DA or DB, DC and DD; Geared Rigid = FXXA or FXXD; Motorized = HA or HD.
(1) PT Series Trolleys require Trolley Adapter Kits for Plain Rigid Mount, see Trolley Adapters on next page.

Hoist Accessories

TIR Flange and Adapters Kits

Flange Kits	Flange Width (in.)	Part No.
Standard	3.25 - 6.00	49558
Wide	6.01 - 12.00	49559
Adapter Kits	**Option Code**	**Part No.**
Hook-on	H	TIR-426
90° Trolley Adapter(1)		43111

(1) Used to mount any 7790 Series hoist parallel to suspension beam. Increases headroom dimension by 1.625 inches).

43111

47717

PT Trolley Adapters

Stationary

Comes with any 7700 Series hoist ordered as a trolley suspended model. Adapter can be ordered separately to convert existing hook suspended 7700 Series hoists for stationary mounting to a PT Series Trolley. Order 47717 (shown) for 1/4 and 1/2 ton models, 47716 for 1 ton models. Spacer kits are required, refer to the price list for details.

TIR-426

Load Chain

ARO hoists are offered with several different load chains. Standard hoists come complete with steel load chains (link or roller). Spark resistant hoists come with stainless steel link load chain.

Chain Length: 7700 Series (1/4, 1/2 ton), 7790 Series (1 ton), 7740B
Length of lift desired + 1 foot = Load chain length

Chain Length: 7700 Series (1 ton), 7790 Series (2 ton)
2 x Length of lift desired + 2 feet = Load chain length

Link Chain

Roller Chain

Hoist Used On	Capacity lbs	Chain Part No.	Chain Size Dia./Pitch	Weight lbs/ft	Feet in Package
Zink Plated Link					
7740B Series	300	44523	.157/.471	.25	250
7700 Series	275, 550, 1100, 2200	37708	.250/.750	.58	250
7790 Series	2200 & 4400	42988	.312/.858	.88	250
Steel Roller					
7740B Series	300	44010	.200/.375	.21	320
7700 Series	400, 800	33364	.400/.625	1.30	320
7700 Series	1600	34332	.400 / .625	1.30	320
Stainless Steel Link					
7700 Series	500, 1500	39489	.250/.750	.62	250
7790 Series	1500, 2400, 3000	43095	.312/.858	.94	250

Hose Carrier Trolley

Easily tracks along same beam that hoist is mounted on. Keeps air hose suspended and out of operator's way. Use one for each 8 feet of hose length.

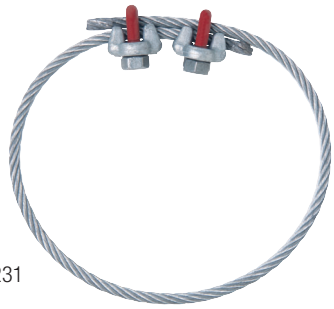
Part No.	Max Hose O.D. in.	Min/Max Beam Height (in.)	Min/Max Beam Flange Width (in.)
7703	$1\frac{1}{4}$	3-10	$2\frac{3}{8}$ - 5
D10-8888			5 - $8\frac{3}{4}$

7703

Restraining Cable

For use as an added safety precaution in hoist suspension. Cable inserts through hole in hoist housing and around I-beam or other structure capable of safely supporting hoist and hoist load weight. Order based upon hoist used.

Hoist Used On	Part No.	Cable Dia. (in.)	Cable Length (ft)
7700 Series	43231	$\frac{1}{4}$	2
7790 Series	43059	$\frac{5}{16}$	$3\frac{1}{2}$



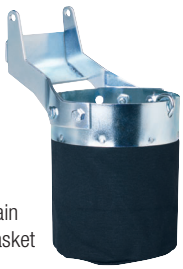
43231

Hoist Accessories

Chain Baskets

Catches and stores load chain as load is lifted. Mounts directly to side of hoist. Order based upon load chain length and hoist being used. Load chain length on 1 ton 7700 Series hoists and 2 ton 7790 Series hoists is twice the lift distance.

Link Chain
Metal Basket



Link Chain
Canvas Basket

Roller Chain
Metal Basket

Load Chain Max Lineal Feet	Link Chain (Metal Basket) 7700	7790	Link Chain (Canvas Basket[1]) 7740B	7700	7790	Roller Chain (Metal Basket) 7740B	7700
10	–	49800 – 10	–	–	43441 – 1	–	37654
12	–	–	44120	–	–	44595	–
16	37653 – 16	–	–	–	–	–	37655
20	–	49800 – 20	–	43554 – 1	43441 – 2	–	–
30	–	49800 – 30	–	–	–	–	–
32	37653 – 32	–	–	43554 – 2	–	–	–
40	–	49800 – 40	–	–	43554 – 3	–	37656
56	37653 – 64	–	–	–	–	–	–
60	–	49800 – 60	–	–	–	–	–
64	–	–	–	43554 – 3	–	–	–
80	37653 – 80	49800 – 80	–	–	–	–	–
86	37653 –100	49800 – 100	–	–	–	–	–

(1) Canvas Baskets are made of specially treated oil resistant material.

Exhausts

Piped Exhaust[1]

Allows exhaust to be piped to a remote area. This is particularly desirable for applications in food processing, chemicals, and processes where atmospheric purity must be maintained.
How to order: specify as option in Ordering Guide.

20308-4 Exhaust Muffler

Threads into exhaust port to minimize sound level. Can be used on 7700 and 7790 Series hoists ordered with piped exhaust option.

(1) Hose not included. Exhaust port is $^{1}/_{2}$" NPTF.

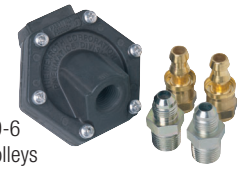
For Field Conversion

- All 7700 Series hoists may be converted to a piped-away exhaust by ordering 46098-1 Head Assembly.
- All 7790 Series hoists (except power trolley models) may be converted to a piped-away exhaust by ordering 43029 Piped Exhaust Adapter.

20308-4

46098-1

20417
Quick Exhaust
Valve



MR-939-6
for TIR Trolleys

43029

Hoist Controls

To convert from pull chain to pendant control: Either nylon braid (standard) or steel braid control hose is available. Steel braid hose is recommended to resist heat or abrasion. Specify the model shown, inserting the pendant length in feet for the *. Maximum 20 feet.

To convert from pendant control to pull chain: Specify 40004-*, where the * is pull chain length desired. Also required are two 34026 valve caps; two Y325-116 O-rings; two 38966 springs and one Y227-3 pipe plug per hoist.

Hoist Used On	Model	Type of Control	Standard Length ft
All 7700E Series	46094-*	Pendant – nylon braid hose	6
All 7700E Series	46369-*	Pendant – steel braid hose	6
All 7790 Series	43106-*	Pendant – nylon braid hose	6
All 7790 Series	46364-*	Pendant – steel braid hose	6
All 7700 & 7790 Series	40004-*	Pull Chain	5

Hoist Accessories

Hooks

ARO offers three different hook configurations designed to meet the needs of any material handling application. All hooks must be ordered separately by specifying model required according to hoist and beam configurations.

Steel Snap-Hooks

Steel snap-hooks have a spring-loaded latch to prevent a lifting eye from popping out of the hook while the load is "grounded." This style of self-closing hooks is the most popular as they are easy and inexpensive to replace.

Bullard Hooks

Ideal for rough, high-speed repetitive applications, these hooks employ a swinging gate latch. Far superior in strength to snap-hooks, the gate latch locks into place to minimize any chance of the "end effector" or "below-the-hook" attachment from leaving the hook.

Self-Closing Latch Hooks

Self-closing latch hooks have the benefits of both spring-loaded snap hooks and Bullard hooks by combining a spring-loaded latch with the strength and durability of the heavier gage Bullard gate.

33381-1 43000 42799 35206 44109

43002 34921 35203 45707

Hoist Series	Capacity (lbs)	Hooks for Link Chain				Hooks for Roller Chain			
		Upper Hook	Hook Opening (in.)	Lower Hook	Hook Opening (in.)	Upper Hook	Hook Opening (in.)	Lower Hook	Hook Opening (in.)
Steel Snap Hooks									
7740B Series	300	44061	29/32	44061	29/32	44061	29/32	44061	29/32
7700 Series 1/8, 1/4 & 1/2 ton	275/550/1100	34921	1 1/8	35014	1	34921	1 1/8	33381-1	1
7700 Series 1/4 ton Spark Res.	500	35113	1 1/8	46565	1	35113	1 1/8	34655-1	1
7700 Series 1 ton	2200	34921	1 1/8	45707(1)	1 1/8	34921	1 1/8	45708(1)	1 1/8
7700 Series 1/2 ton Spark Res.	1000	N/A	–	N/A	–	35113	1 1/8	45710(1)	1 1/8
7700 Series 3/4 ton Spark Res.	1500	35113	1 1/8	45709(1)	1 1/8	N/A	–	N/A	–
7790 Series 1 ton	2200	43002	1 1/8	43000	1 1/8	N/A	–	N/A	–
7790 Series 3/4 ton Spark Res.	1500	43097	1 1/8	43110	1	N/A	–	N/A	–
7790 Series 2 ton	4400	43049	1 1/4	43048(1)	1 1/4	N/A	–	N/A	–
7790 Series 1 ton Spark Res.	2400	43096	1 1/4	43101	1 1/4	N/A	–	N/A	–
7790 Series 1 1/2 ton Spark Res.	3000	43096	1 1/4	43101	1 1/4	N/A	–	N/A	–
Bullard Hooks									
7740B Series	300	44109	1 1/32	44109	1 1/32	44109	1 1/32	44109	1 1/32
7700 Series 1/4 & 1/2 ton	550/1100	35203	1 3/16	35206	1 1/16	35203	1 3/16	35205	1 1/16
7700 Series 1 ton	2200	35203	1 3/16	45934(1)	1 3/16	35203	1 3/16	45935(1)	1 3/16
7790 Series 1 ton	2200	43458	1 3/16	43456	1 3/16	N/A	–	N/A	–
7790 Series 2 ton	4400	43459	1 7/16	43460*	1 7/16	N/A	–	N/A	–
Self-Closing Latch Hooks									
7700 Series 1/8, 1/4 & 1/2 ton	275/550/1100	N/A	–	42799	1 1/2	N/A	–	N/A	–

(1) Includes Sheave Block

Air Hose

N12-12B

Vinyl Grip

47469

EZ Grip Ergo Handle

EZG-A269

Filter-Lubricator

C21-04-000

Filter-Regulator-Lubricator

C21-04-FGK0-20

Hoist Accessories

Maintenance Items

Service Kits

Each kit contains the necessary replacement parts normally required during a preventative maintenance service procedure. Kits provide an easy method for parts inventory.

Hoist used On	Kit Description	Kit No.
All 7700-E Series	Hoist Motor Only	41329-1
7700E Series – Roller Chain	Sprocket and Guide	41335
7700E Series – Link Chain	Pocket Wheel and Guide	41336
All 7790A Series	Hoist Motor Only	41619-1
7790 Series – Link Chain	Pocket Wheel and Guide	41759

33541 Brake Spring Spreader

Designed to aid in the removing of brake spring during maintenance procedure.

Lubricants

These approved lubricants are suggested for either routine preventative maintenance procedures or for total hoist overhaul.

Model no.	Amount	Product Description	Where Used
29665	1 qt. (.9 L)	Detergent free spindle oil with viscosity of 155-165 S.U.S. at 100ºF and aniline point of 217ºF.	In airline lubricator to provide lubrication to hoist air motor.
33153	5 lb (2.3 kg)	"EP" (extreme pressure) bearing and gear grease, NLGI No. 1 with viscosity of 750 S.U.S. at 100ºF.	Pocket wheel, hoist gears, sheave block.
40164	1 qt. (.9 L)	Gear oil	All 7790 Series hoist gearing.
36460	4 oz. (118 ml)	Stringy lubricant for rubber seals.	All "O" rings.
Lubri-Link Green	16 oz. spray bottle	Triple protection, USDA approved lubricant. Extreme pressure formula.	Load chain. Wherever penetrating,
LLG-5	5 gallon bulk container	and corrosion inhibitors, penetrating oils.	lubricating oils are used.

29665

33153

40164

36460

Lubri-Link Green

Hoists and Trolleys

How to Order a Hoist

Specify complete model number as shown. This model code includes: Base Model - Control Option, Upper Suspension, Lift - Lower Suspension, Control Length, and Options.

Example: *7712EL-3HA20-R16U*

Base Model - Link Chain Models

Zinc Plated Steel Link Chain
7740B = 300 lbs
7770E = 275 lbs
7718E = 550 lbs
7756E = 1100 lbs
7776E = 2200 lbs
7790A = 2200 lbs
7792A = 4400 lbs

Spark Resistant Stainless Steel Link Chain
7712EL = 550 lbs
7714EL = 1500 lbs
7796AL = 1500 lbs
7798AL = 2400 lbs
7790AL = 3000 lbs

Steel Roller Chain
7720E = 400 lbs
7708E = 800 lbs
7732E = 1600 lbs

Control Option
0 = No Controls
1 = Pull Chain
2 = Pendent Control
3 = 2 Motor Pendent[1]
4 = 3 Motor Pendent[1]

Upper Suspension
A = Lug/Adapter[1]
C = Steel Snap Hook
E = Eye Bolt (7740B only)
DA = Push Trolley A Flg[1]
DB = Push Trolley B Flg[1]
DD = Push Trolley D Flg[1]
FxxA = Hand Geared Trolley A Flg[1]
FxxD = Hand Geared Trolley D Flg[1]
HA = Powered Trolley A Flg[1]
HD = Powered Trolley D Flg[1]
K = Bullard Hook, manual closing
R = Bronze Snap Hook[1][2]

Lift (ft) -
10 = Standard
XXX = Specify length

Lower Hook
C = Steel Snap Hook
G = Self Latching Hook[1]
K = Bullard Hook, manual closing[3]
R = Bronze Snap Hook[1]

Control Length (ft)
6 = Standard
XXX = Specify length

Options
P = Piped Away Exhaust Kit[4]
S = Steel Container[3][5]
U = Canvas Basket

Notes:
(1) Not available on 7740B
(2) Standard on spark resistant models
(3) Not available on spark resistant models
(4) Not available on 7790 models with powered trolleys
(5) Roller chain basket uses same letter code

How to Order a PT Series Trolley Separately

Specify a complete trolley model by including the A, or -8, beam flange width code desired. Use a dash "-" to separate the desired S•COR•E option and ADD the prices shown to the completed base model.

Example: *PT010A-EN*

Series
PT = Plain Trolley

Capacity
005 = 1100 lbs
010 = 2200 lbs
020 = 4400 lbs

Flange Width -
A = Standard width
-8 = First increment oversize
Note:
See Specifications chart on previous page for actual flange width

S•COR•E
EN = Electroless nickel plate on all trolley components (005 and 010 capacities only)
EP = Electroless nickel plate wheels and hanger shaft only (005 and 010 capacities only)
SB = Solid bronze wheels and electroless nickel plate hanger shaft

How to Order a TIR Series Trolley Separately

Example: *TIR6600S-307AA*

Series
TIR

Capacity
6600 = 6600 lbs

Standard or S•COR•E -
S = Standard cast iron wheels
B = Solid bronze wheels for S•COR•E features

Type
P = Plain trolley
G = Hand chain gear driven
0 = Vane motor, air driven, no pendent
2 = Vane motor, air driven, 1 motor pendent
3 = Vane motor, air driven, 2 motor pendent
4 = Vane motor, air driven, 3 motor pendent

Chain or Pendent Length (ft)
07 = 7 ft (standard for pendent)
08 = 8 ft (standard for hand chain)
XX = Specify length in feet
00 = No pendent or hand chain

Flange Width
A = Fits 3.25 - 6.00
D = Fits 6.01 - 12.00

Suspension Type
A = 7790 suspension (no lug required)
E = 7700 rigid lug adapter
H = Hook-on adapter

Detailed

Performance Data

Operating Pressure psig	Load															
	Up		Down		Up		Down		Up		Down		Up		Down	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
7740B Series Hoists – 300 lb Capacity																
	0 lbs				100 lbs				200 lbs				300 lbs			
0	1.0	–	0	–	0	–	0	–	0	–	0	–	0	–	0	–
60	16.9	–	13.0	–	15.4	–	14.1		14.1	–	15.0	–	12.5	–	15.6	–
70	17.4	–	13.9	–	16.2	–	14.8		15.0	–	15.0	–	13.0	–	15.8	–
80	18.5	–	14.1	–	17.4	–	15.2		16.0	–	15.0	–	14.8	–	16.2	–
90	18.7	–	14.1	–	18.5	–	16.0		17.1	–	16.0	–	15.6	–	16.9	–
100	20.0	–	15.0	–	19.1	–	15.8		17.9	–	16.9	–	16.2	–	17.1	–
7700 Series Hoists – 1/4 ton Capacity																
	100 lbs				300 lbs				400 lbs				550 lbs			
0	0	0	98	96	0	0	202	196	0	0	234	230	0	0	258	288
60	155	71	160	42	86	42	186	52	50	28	214	128	30	0	236	182
70	160	75	166	42	100	50	186	50	72	32	212	105	54	12	234	156
80	172	81	170	40	112	56	184	48	88	40	208	60	70	22	230	136
90	184	89	174	36	122	64	182	46	100	48	202	56	82	28	224	120
100	192	91	176	36	130	68	182	44	110	52	198	54	92	38	214	56
7700 Series Hoists – 1/2 ton Capacity																
	400 lbs				600 lbs				800 lbs				1100 lbs			
0	0	0	74	69	0	0	101	98	0	0	126	124	0	0	149	144
60	57	31	82	20	43	21	93	26	32	11	107	64	15	0	118	91
70	62	34	82	19	50	25	93	25	39	16	105	52	27	6	117	78
80	67	37	82	18	56	28	92	24	44	20	104	30	35	11	115	68
90	72	40	82	18	61	32	91	23	50	24	101	28	41	14	112	60
100	75	41	82	17	65	34	91	22	56	26	99	26	46	19	107	28
7700 Series Hoists – 1 ton Capacity																
	800 lbs				1200 lbs				1600 lbs				2200 lbs			
0	0	0	37	35	0	0	51	49	0	0	63	62	0	0	75	72
60	29	16	41	10	22	11	47	13	16	6	54	32	8	0	59	46
70	31	17	41	10	25	13	47	13	20	8	53	26	14	3	59	39
80	34	19	41	9	28	14	46	12	22	10	52	15	18	6	58	34
90	36	20	41	9	31	16	46	12	25	12	51	14	21	7	56	30
100	38	21	41	9	33	17	46	11	28	13	50	13	23	10	54	14
7790 Series Hoists – 1 ton Capacity																
	800 lbs				1200 lbs				1600 lbs				2200 lbs			
0	0	0	19	19	0	0	29	29	0	0	38	38	0	0	50	50
60	28	5	26	0	22	0	36	3	17	0	39	4	12	0	42	7
70	31	6	35	0	27	5	38	3	23	0	41	5	19	0	43	5
80	34	7	36	0	30	6	39	4	27	4	41	5	23	0	43	5
90	37	8	37	0	33	7	40	0	30	6	41	4	26	4	44	5
100	38	10	37	0	36	9	40	0	33	7	41	4	29	6	44	4
7790 Series Hoists – 2 ton Capacity																
	1000 lbs				2000 lbs				3000 lbs				4400 lbs			
0	0	0	6	6	0	0	12	12	0	0	18	18	0	0	25	25
60	16	5	17	2	12	0	18	2	9	0	21	3	6	0	23	13
70	18	6	18	2	14	3	19	3	12	0	22	3	8	0	24	12
80	19	6	18	2	16	4	20	3	12	0	22	3	12	0	24	8
90	20	6	19	2	17	5	20	3	14	0	22	3	12	0	24	4
100	21	7	19	2	18	6	21	3	15	4	22	3	13	0	24	6

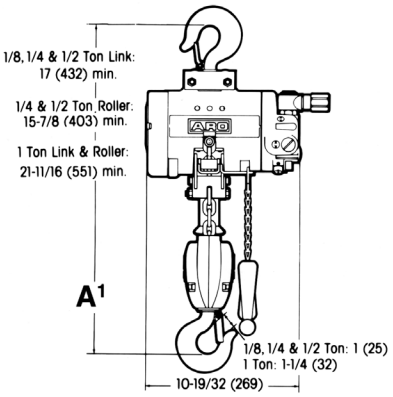
Note: "Max." and "Min." values relate to speed in feet (ft) at various inlet pressures. Air consumption for 7740B = 12 scfm. All others = 65-70 scfm.

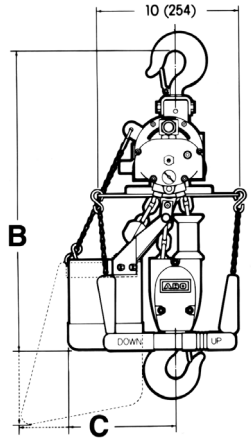
Dimensional Drawings

7700 Series Air Chain Hoists

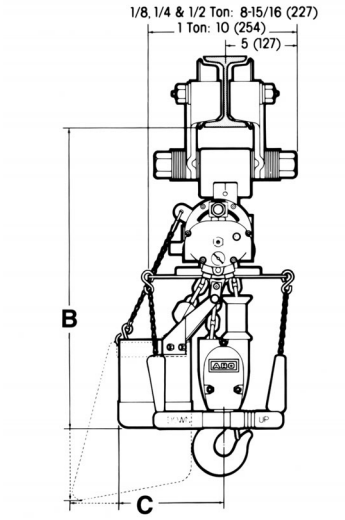
Typical headroom dimensions (**A**) are indicated in dimensional drawings.

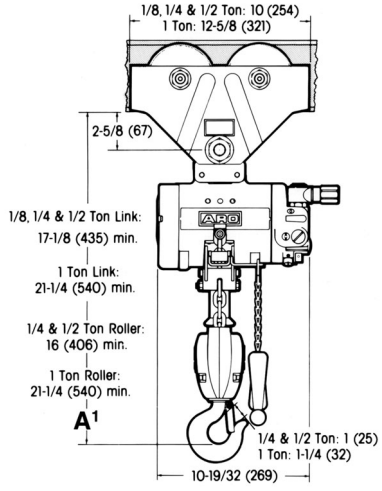
Hook Mounted



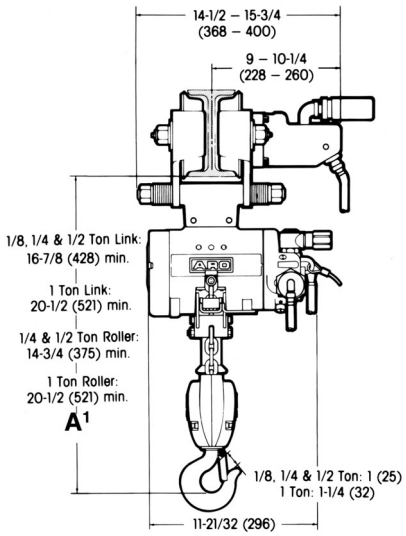


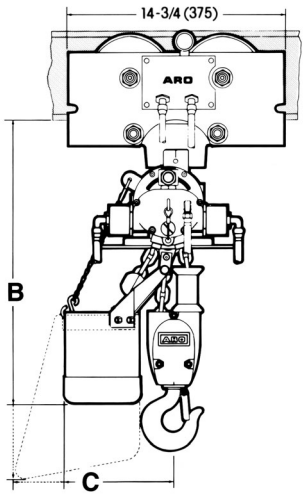
Trolley Mounted





Motorized Trolley Mounted





Note:

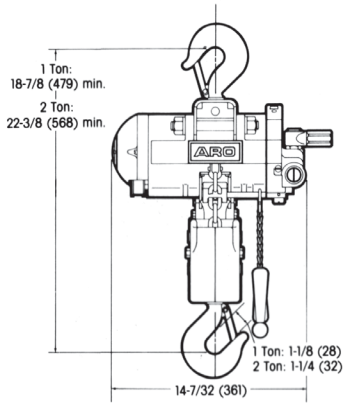
(1) Dimension "A" for the 7700 Series 1/8, 1/4 and 1/2 ton hoists increases 1 inch for each Bullard hook used.

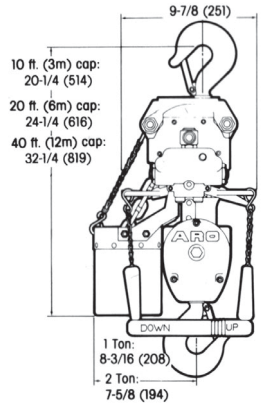
Basket Capacity (ft)	Hook Mt (in.) B	Hook Mt (in.) C	Trolley Mt (in.) B	Trolley Mt (in.) C	Motorized Trly (in.) B	Motorized Trly (in.) C
Link Type						
20	21	7 3/4	21 1/2	7 3/4	20 3/16	7 3/4
32	25 1/2	7 3/4	26	7 3/4	24 11/16	7 3/4
56	31 1/2	7 3/4	32	7 3/4	30 11/16	7 3/4
Roller Type						
10	25 7/16	11 3/16	25 15/16	11 3/16	24 7/8	11 3/16
16	29 1/4	14 7/16	29 3/4	14 7/16	28 11/16	14 7/16
40	39 15/16	20 9/16	40 7/16	20 9/16	39 3/8	20 9/16

7790 Series Air Chain Hoists

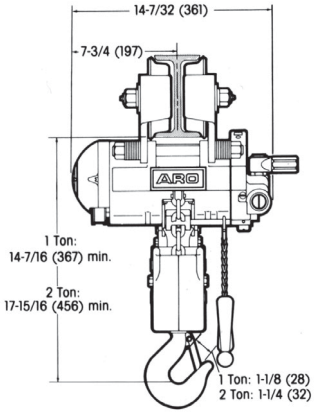
Typical headroom dimensions (**A**) are indicated in dimensional drawings.

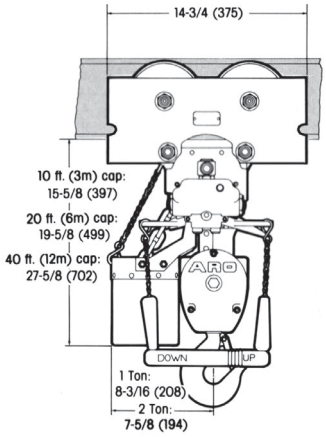
Hook Mounted



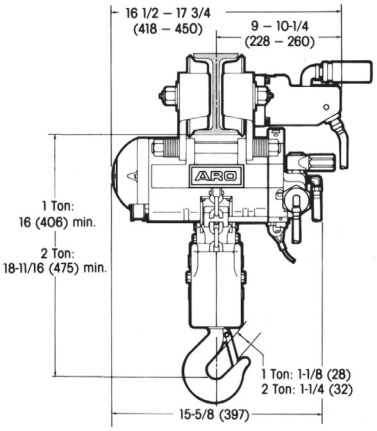


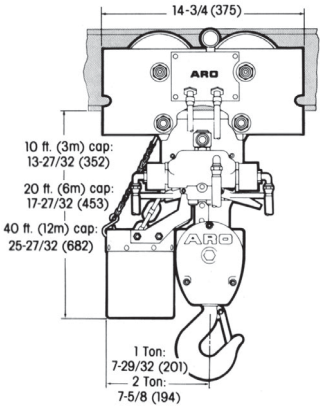
Trolley Mounted





Motorized Trolley Mounted





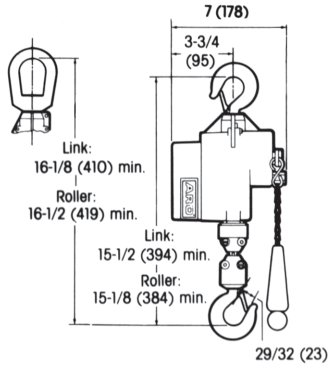
Note:

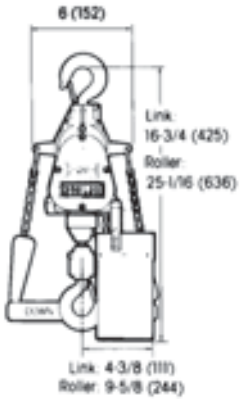
(1) Dimension "A" for the 7790 Series 1 ton hoist increases $1^{1}/_{4}$ inch and $1^{1}/_{2}$ inch for the 2 ton for each Bullard hook used.

7740B Series Air Chain Hoist

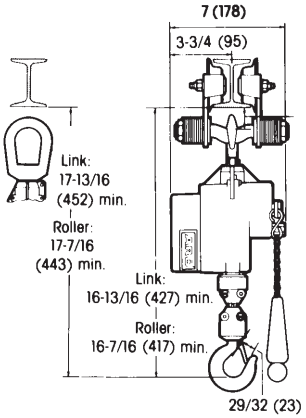
Typical headroom dimensions (**A**) are indicated in dimensional drawings.

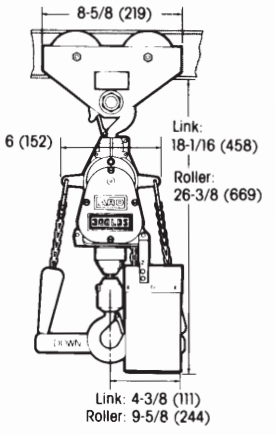
Hook Mounted





Trolley Mounted





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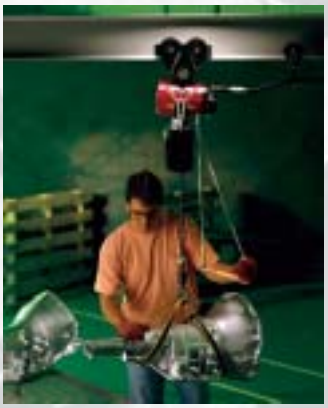

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WARNING: This equipment is not designed for transporting people or lifting loads over people. It is the user's responsibility to determine the suitability of this product for any particular use and to check compliance with applicable regulations. Before installation, see maintenance and operations manual for additional warnings and precautions.

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